

**HORALABIOSA PALANIENSIS, A NEW CYPRINID FISH FROM PALANI HILLS,  
WESTERN GHATS, SOUTH INDIA<sup>1</sup>**

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(With two plates)

A new species *Horlabiosa palaniensis* is described from Palani Hills. This is the second species to be described under this genus, the first species being *Horlabiosa joshuai* Silas described in 1953.

INTRODUCTION

The genus *Horlabiosa* Silas, 1953, was erected to accommodate a population of small hill-stream fishes which superficially resemble *Garra* Hamilton, but differ from it in the presence of a minutely papillated post-labial callous pad in the mental region. *Horlabiosa joshuai* Silas, the type species, was described from the headwaters of the Tambraparni River at Singampatti, Singampatty Range, Tirunelveli District. Its specific status has been however, disputed by subsequent workers and it has either been overlooked (Jayaram 1981) or synonymised with *Garra* (Talwar and Jhingran 1991). A good collection of *H. joshuai* from Kalakad Wildlife Reserve, Tirunelveli district, however, enabled the senior author to establish its identity and give a detailed redescription of the fish (Rema Devi, in press). The present discovery of another species, from Palani Hills confirms the validity of this genus.

**Holotype:** In Southern Regional Station, Zoological Survey of India, Madras, Reg. No. F. 3909, Palani Hills, Western Ghats, South India, 77.0 m SL., collected by G.U. Kurup, 27th Feb. 1972.

**Diagnosis:** a small sized hill stream fish with elongate and slightly compressed body;

differs from the other known species in the absence of scales along dorsal base, pre-dorsal region and also along the ventral region.

***Horlabiosa palaniensis* sp. nov.**

(Plate 1, Figs. 1 & 2)

**Description:** D. 2/7; P. 1/14; V. 1/8; A.2/5; C. 1/17/1; Ll.37; L. tr. 3 1/2 / 2 1/2; predorsal scales absent.

Body elongate, its greatest height below the commencement of dorsal 5.83 in SL; head length 4.24 in SL; height of head 1.81, head width 1.35 in its length; eye diameter 5.78, interorbital width 2.64, snout 2.14 in head length; length of mental pad 4.54, its width 5.56 in head length; length of pectoral fin 1.21, of dorsal 1.51 in HL; base of dorsal 1.43 in its height; length of pectoral fin 5.13, dorsal 6.42, pelvic 6.09, anal 7.95 in SL; predorsal distance 1.98, prepelvic distance 1.82, distance from pectoral to anus 1.99 in SL; the distance from anus to anal fin origin is 4.36 in the distance from pelvic to anal; height of caudal peduncle 1.64 in its length.

**Etymology:** The species is named after the locality from where collections were made.

**Distribution:** Palani Hills, Western Ghats, South India.

**Relationship:** *H. palaniensis* differs from *H. joshuai* (Plate 2, Figs. 1 & 2) in the absence of scales along predorsal and dorsal base and also the ventral side up to anal

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Rema Devi & Menon: *Horatlabiosa palaniensis* sp. nov.

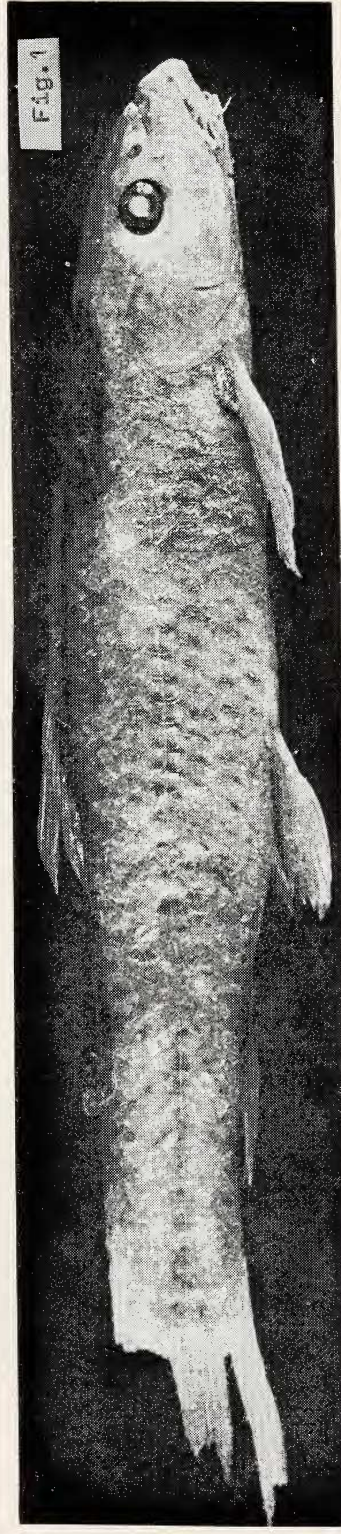


Fig. 1. Lateral view of *Horatlabiosa palaniensis* sp. nov., 77.0 mm SL.  
Fig. 2. Ventral view of *H. palaniensis*, 77.0 mm SL.

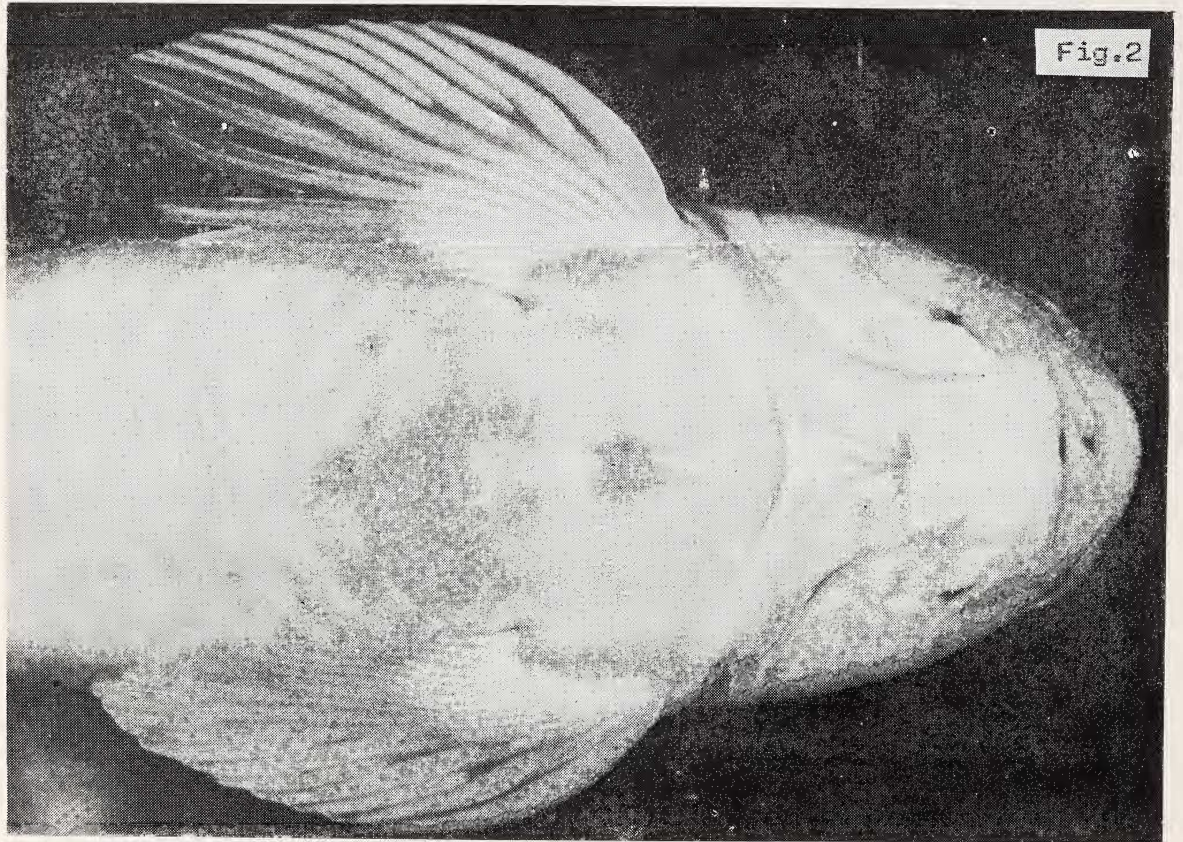
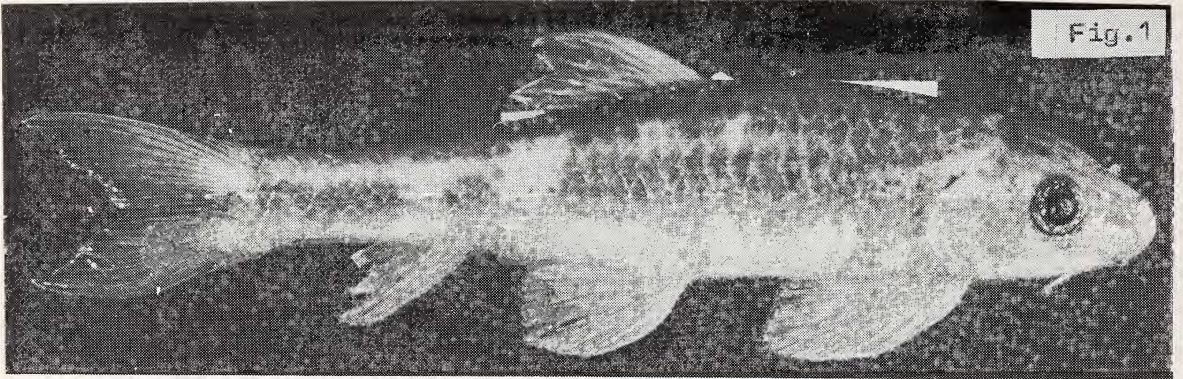


Fig. 1. Lateral view of *Horabiosia joshuai* Silas, 75.0 mm SL.

Fig. 2. Ventral view of *H. joshuai*, 90.0 mm SL.

origin, whereas in the latter, the chest alone is devoid of scales. Other differences observed in *H. palaniensis* as compared to specimens of *H. joshuai* collected and studied from Kalakad are as follows: The body is more slender in *H. palaniensis* (body depth 5.83 in SL as against 4.45 (3.92-5.56) in SL in *H. joshuai*); head more compressed (head depth 1.81 in its length vs. 1.59 (1.27-1.76)); head is longer 4.24 vs. 3.53 (3.09-3.92) in SL; caudal peduncle slender 1.64 vs. 1.24 (0.92 - 1.60) in its length; eye smaller and snout longer in proportion to head length, eye diameter 2.69 vs. 1.65 (1.27 - 2.28) in length of snout; eye 5.78 in head length vs. 4.42 (3.40-5.75) in head length in *H. joshuai*.

**Ecology:** *H. palaniensis* co-exists with

*Garra hughi* Silas, another species, characterised by the absence of scales along the mid-dorsal streak and the ventral region. The loss of scales in these two species is probably due to convergent evolution, the scaleless dorsal surface offering least resistance to torrential mountain currents and the scaleless ventral surface offering broader surface for better adhesion to the rocky bottom.

#### ACKNOWLEDGEMENTS

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### THE GENUS *MACROCHELES* LATREILLE (ACARINA : MACROCHELIDAE) IN INDIA. 4. TWO NEW SPECIES ASSOCIATED WITH DUNG BEETLES (COLEOPTERA: SCARABAEIDAE) FROM SOUTH INDIA<sup>1</sup>

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(With twenty text-figures)

Two new species of *Macrocheles* *M. punctovariata* and *M. sisiri* are described from South India.

#### INTRODUCTION

Phoretic relationship is common among members of the genus *Macrocheles*. Usually females of the coprophilous *Macrocheles* display phoretic association with insects, par-

ticularly dung beetles (Evans and Hyatt 1963, Costa 1967). They are predators. The predatory habit of *Macrocheles* is an asset which may contribute to their role as biological control agents in reducing population of dung-breeding flies (Krantz 1983). Phoretic *Macrocheles* are little known in India. Evans and Hyatt (op. cit.) described 4 such new species, namely *ceylonicus*, *krantzi*,

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